

CLAIMS

1. Measuring equipment for conducting a measurement using a cartridge container in which a specimen and a reagent are injected separately into a plurality of vessels,

5 the cartridge container being either a special-purpose cartridge container, which is injected separately in advance with predetermined reagents corresponding to items of a measurement object and sealed with a sealing material on which an information carrier including information

10 relevant to the cartridge container is attached, or a general-purpose cartridge container that does not have the information carrier and is injected separately with reagents by a measurer, and the equipment comprises:

15 carrier identification means for deciding whether an information carrier is attached to a cartridge container of a measurement object;

15 measurement condition storage means for storing measurement conditions for each item of the measurement object; and

20 operation control means that decides from an output of the carrier identification means whether the cartridge container of the measurement object is a special-purpose cartridge container or a general-purpose cartridge

20 container, and when the cartridge container of the measurement object is a special-purpose cartridge container, a measurement is conducted according to measurement conditions read out from the measurement condition storage means based on the information included in the information carrier, whereas when the cartridge container of a measurement object is a general-purpose

25 cartridge container, a measurement is conducted by outputting an instruction to select items of the measurement object to output means and reading out the measurement conditions from the measurement condition storage means for the items of the measurement object selected and input from input means.

30 2. The measuring equipment according to claim 1, wherein the information carrier is an optically readable carrier, and optical read means is disposed in means for transferring liquid between the vessels of the cartridge container.

35 3. The measuring equipment according to claim 1 or claim 2, further comprising information read means to read information from a magnetic recording medium, wherein the operation control means directs the

information read means to read measurement conditions recorded in the recording medium and to store them in the measurement condition storage means.

- 5      4.      The measuring equipment according to any one of claims 1 to 3, wherein the measurement condition storage means has a first area where measurement conditions for using the special-purpose cartridge container are recorded and a second area where measurement conditions for using the general-purpose cartridge container are stored, and
- 10      the operation control means analyzes the measurement conditions read from the recording medium by the information read means, and stores them in the first area when the measurement conditions are measurement conditions related to a measurement using a special-purpose cartridge container and in the second area when the measurement conditions are measurement conditions related to a measurement using a general-purpose cartridge container.
- 15      5.      The measuring equipment according to claim 4, wherein a specific identification number for each item of a measurement object is given to the special-purpose cartridge container, and when the measurement conditions read from the recording medium by the information read means are measurement conditions related to a measurement using a general-purpose cartridge container, the operation control means gives, as an identification number of a general-purpose cartridge container used for this measurement, an identification number in a range that does not overlap with the identification numbers given to the special-purpose cartridge container in a sequential order, and stores them in the second area.
- 20      6.      The measuring equipment according to any one of claims 1 to 5, wherein all reagents and solvents needed for the measurement are injected separately into the special-purpose cartridge container.
- 25      7.      The measuring equipment according to any one of claims 1 to 6, wherein a waste vessel is disposed in the cartridge container to store waste liquid.
- 30      8.      A measuring method for conducting a measurement using a cartridge

container in which a specimen and a reagent are injected separately into a plurality of vessels,

the cartridge container being either a special-purpose cartridge container, which is injected separately in advance with predetermined reagents corresponding to items of a measurement object and sealed with a sealing material on which an information carrier including information relevant to the cartridge container is attached, or a general-purpose cartridge container that does not have the information carrier and is injected separately with reagents by a measurer, and the method comprises:

deciding whether the cartridge container of the measurement object is a special-purpose cartridge container or a general-purpose cartridge container based on whether an information carrier is attached to the cartridge container of the measurement object, and

when the cartridge container of the measurement object is a special-purpose cartridge container, conducting a measurement following the measurement operation procedures corresponding to the information included in the information carrier, whereas

when the cartridge container of the measurement object is a general-purpose cartridge container, outputting an instruction to select items of the measurement object and conducting a measurement following measurement operation procedures corresponding to the selected and input items of the measurement object.

9. The measuring method using measuring equipment according to any one of claims 1 to 7, the method further comprising:

separately injecting a predetermined reagent and a specimen into a general-purpose cartridge container;

setting the general-purpose cartridge container in the measuring equipment; and

selecting and inputting items of a measurement object following an instruction from the measuring equipment to select items of the measurement object.

10. A program recording medium that records a control program for directing measuring equipment to execute a measurement using a cartridge container with a plurality of vessels injected separately with a specimen and a reagent, the measuring equipment comprising carrier identification means

for deciding whether an information carrier is attached to a cartridge container of a measurement object, measurement condition storage means for storing measurement conditions for each item of the measurement object, and measuring means for conducting a measurement according to the measurement conditions, wherein the control program comprises:

5       deciding from an output from the carrier identification means whether the cartridge container of the measurement object is a special-purpose cartridge container, which is injected separately in advance with predetermined reagents corresponding to items of the measurement object and sealed with a sealing material on which an information carrier including information relevant to the cartridge container is attached, or a general-purpose cartridge container that does not have the information carrier and is injected separately with reagents by a measurer, and

10      when the cartridge container of the measurement object is a special-purpose cartridge container, conducting a measurement following the measurement conditions read out from the measurement condition storage means based on the information included in the information carrier, whereas

15      when the cartridge container of a measurement object is a general-purpose cartridge container, outputting an instruction to select items of the measurement object and conducting a measurement following the measurement conditions read out from the measurement condition storage means corresponding to the items of the measurement object selected and input based on the output.

20

25      11. A program recording medium that records a control program for directing measurement equipment to store measurement conditions in measurement condition storage means of the measuring equipment, the measuring equipment comprising the measurement condition storage means for storing measurement conditions for each item of a measurement object and uses a cartridge container including a plurality of vessels injected separately with a specimen and a reagent, and the control program comprises:

30      deciding whether the input measurement conditions are measurement conditions related to a measurement using a special-purpose cartridge container, which is injected separately in advance with predetermined reagents corresponding to items of a measurement object and sealed with a sealing material on which an information carrier including

35

information relevant to the cartridge container is attached, or measurement conditions related to a measurement using a general-purpose cartridge container that does not have the information carrier and is injected separately with reagents by a measurer, and based on the decision result,

5 storing the measurement conditions to different areas of the measurement condition storage means.

12. The program recording medium according to claim 11, wherein a specific identification number for each item of the measurement object is  
10 given to the special-purpose cartridge container, and  
when the input measurement conditions are measurement conditions related to a measurement using a general-purpose cartridge container, the control program gives, as an identification number of a general-purpose cartridge container used for this measurement, an identification number in a  
15 range that does not overlap with the identification numbers given to the special-purpose cartridge container in a sequential order, and stores them in the measurement condition storage means.

13. The program recording medium according to claim 11 or 12, wherein  
20 the measurement conditions are recorded in a magnetic recording medium, and the control program inputs the measurement conditions from magnetic information read means equipped in the measuring equipment.